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09/714,510	11/17/2000	Takeshi Miura	Q61857	5024

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EXAMINER
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NALEVANKO, CHRISTOPHER R

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/714,510

Applicant(s)

MIURA ET AL.

Examiner

Christopher R Nalevanko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 09/30/2004 have been fully considered but they are not persuasive.

Regarding Claims 1 and 7-9, Applicant argues that "Billock does not suggest also broadcasting the program in accordance with a broadcast schedule" (page 14-15 lines 21-2). Examiner asserts that Billock clearly shows using a broadcast schedule when transmitting program data (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule). Billock shows assigning program data time slots, which is a schedule of delivery. Furthermore, Billock shows that the programs are delivered in correspondence to a program guide, which is a line-up schedule of programs.

2. Applicant's arguments with respect to Billock failing to show if the program is a past program broadcast in accordance with a schedule, with regards to Claims 1 and 8, have been considered but are moot in view of the new ground(s) of rejection.
3. Regarding Applicant's challenge of the Examiner's Official Notice in Claims 2, 3, 5, 10, 11, and 13, Examiner has supplied support for the argument with Gordon et al U.S. Patent No. 5,920,700 and subsequently changed the rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15-22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Girard et al (5,751,282).

Regarding Claim 15, Girard shows a center station comprising a center control circuit and a memory (col. 3 lines 1-10, centralized head end server), and a plurality of terminal stations connected to the center station via a communication network (col. 3 lines 1-22, set top boxes connected by network), wherein a first terminal station comprises a terminal control circuit (col. 3 lines 8-10, controlling which programs are displayed), wherein the center control circuit broadcasts a program, in accordance with a broadcast schedule (col. 3 lines 30-54, EPG, col. 4 lines 48-65, col. 6 lines 13-22, continuous media server providing programs), to the plurality of terminal stations via the communication network (col. 3 lines 1-22, set top boxes connected by network) and stores the program in the memory (col. 4 lines 48-65, storing programs), wherein, if a user of the first terminal station selects the program after the center control circuit broadcasts the program, the first terminal control circuit sends a program request signal to the center station (col. 6 lines 45-67, col. 7 lines 1-5, user requesting past video program), and wherein the center control circuit reads the program from the memory in response to the program request signal and re-transmits the program to at least the first terminal (col. 6 lines 45-67, col. 7 lines 1-5, head-end sending program in response to request).

Regarding Claim 16, Girard shows transmitting an electronic program guide, which contains at least part of the broadcast schedule (col. 3 lines 30-54, EPG) and which

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identifies the program based on at least a broadcast time of the program (col. 3 lines 44-54, displaying broadcast time), to the first terminal station wherein the first terminal control circuit displays the electronic program guide (col. 3 lines 23-31, displaying on television), and wherein the electronic program guide indicates whether or not the program has already been broadcast (col. 4 lines 8-23, displaying past programs).

Regarding Claim 17, Girard shows request a past program, or a program that has already been broadcast (col. 6 lines 45-65, selecting past program).

Regarding Claim 18, Girard shows a guide indicates that the program has already been broadcast and the user selects the program, the first terminal control circuit sends the program request signal to the center station (col. 6 lines 45-67, col. 7 lines 1-5, user requesting past video program), and wherein, when the electronic program guide indicates that the program has not been broadcast and the user selects the program, the first terminal control circuit does not send the program request signal to the center station (col. 5 lines 60-65, col. 6 lines 14-45, automatically tuning currently broadcasting data streams).

Regarding Claim 19, Girard shows that when a currently broadcast program is selected, the STB merely tunes to the correct data stream, as is conventionally done in the art (col. 5 lines 60-65, col. 6 lines 14-45, automatically tuning currently broadcasting data streams).

Regarding Claim 20, Girard shows a terminal station comprising a display (col. 3 lines 5-10, television display), and a control circuit (col. 3 lines 8-10, controlling which programs are displayed), wherein the control circuit receives an electronic program guide

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that identifies past programs that have been broadcast from a center station in the past (col. 4 lines 8-23, displaying past programs), identifies current programs that are currently being broadcast from the center station (col. 6 lines 34-45, current programs), and identifies future programs that will be broadcast from the center station in the future (col. 7 lines 25-40, future programs), wherein the control circuit displays the electronic program guide on the display (col. 3 lines 24-30, displaying EPG), wherein, when a user selects a selected past program from one of the past programs identified in the electronic program guide, the control circuit outputs a request signal to the center station requesting the center station to re-transmit the selected past program to the terminal station (col. 6 lines 45-67, col. 7 lines 1-5, head-end sending program in response to request).

Regarding Claim 21, the limitations of the claim have been discussed with regards to Claim 18.

Regarding Claim 22, the limitations of the claim have been discussed with regards to Claim 19.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 7 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Billock et al. (6,314,575).

Regarding Claim 7, Billock shows a program transmitting/receiving system having a center device and at least one terminal device connected through a communication device to the center device (col. 3 lines 60-67, col. 4 lines 1-15, telecasting facility and viewing stations). The center device comprising a program information memory device for storing an information with regard to a program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage) generated on the basis of a schedule to broadcast a program (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), a program information transmitting device for transmitting the information with regard to the program to the terminal device through the communication device (col. 3 lines 3-34, col. 4 lines 5-15, central transmitting station), a broadcasting device for broadcasting the program to the terminal device through the communication device (col. 6 lines 13-51, sending video to viewer), in accordance with the schedule (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), and for storing the program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage) therein at a transferable condition to the terminal device, and a request program transmitting device for receiving a request signal of the program transmitted by the terminal device, and for transmitting the program, corresponding to the request signal of the program and stored at the transferable condition, through the communication device to the terminal device at least transmitting the request signal of the program (col. 6 lines 13-51, receiving request from viewing station and providing video).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 8-9 are rejected under 35 U.S.C. 35 U.S.C. 103(a) as being unpatentable over Billock et al. (6,314,575) in further view of Girard et al ( 5,751,282).

Regarding Claim 1, Billock shows a program transmitting/receiving system having a center device and at least one terminal device connected through a communication device to the center device (col. 3 lines 60-67, col. 4 lines 1-15, telecasting facility and viewing stations). The center device comprising a program information memory device for storing an information with regard to a program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage) generated on the basis of a schedule to broadcast a program (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), a program information transmitting device for transmitting the information with regard to the program to the terminal device through the communication device (col. 3 lines 3-34, col. 4 lines 5-15, central transmitting station), a broadcasting device for broadcasting the program to the terminal device through the communication device (col. 6 lines 13-51, sending video to viewer), in accordance with the schedule (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), and for storing the program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage)



therein at a transferable condition to the terminal device, and a request program transmitting device for receiving a request signal of the program transmitted by the terminal device, and for transmitting the program, corresponding to the request signal of the program and stored at the transferable condition, through the communication device to the terminal device at least transmitting the request signal of the program (col. 6 lines 13-51, receiving request from viewing station and providing video). Furthermore, Billock shows the terminal device comprising a program information receiving device for receiving the information with regard to the program transmitted by the center device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), a program receiving device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), an image information generating device for generating an image information for a program selection of a user (col. 8 lines 15-35, graphics computer), a program request signal transmitting device for transmitting the request signal of the program selected by the user to the center device through the communication device (col. 10 lines 58-65, col. 13 lines 10-67, transmitting requests to central facility), and a request program receiving device for receiving the program corresponding to the request signal of the program (col. 8 lines 15-67, col. 9 lines 1-67, viewing station, col. 8 lines 15-35, graphics computer). Billock fails to show that the program selected could be a past program broadcast in accordance with the schedule information from the center device. Girard shows that the program selected could be a past program broadcast in accordance with the schedule information from the center device (col. 4 lines 8-23, col. 5 lines 45-67, col. 6 lines 1-7, 34-65, selecting and viewing past programs according to a schedule). It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to modify Billock with the ability to select past programs, as in Girard, so a user could view at their own convenience a program that they might have missed.

Regarding Claim 8, Billock shows the terminal device comprising a program information receiving device for receiving the information with regard to the program transmitted by the center device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), a program receiving device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), an image information generating device for generating an image information for a program selection of a user (col. 8 lines 15-35, graphics computer), a program request signal transmitting device for transmitting the request signal of the program selected by the user to the center device through the communication device (col. 10 lines 58-65, col. 13 lines 10-67, transmitting requests to central facility), and a request program receiving device for receiving the program corresponding to the request signal of the program (col. 8 lines 15-67, col. 9 lines 1-67, viewing station, col. 8 lines 15-35, graphics computer). Billock fails to show that the program selected could be a past program broadcast in accordance with the schedule information from the center device. Girard shows that the program selected could be a past program broadcast in accordance with the schedule information from the center device (col. 4 lines 8-23, col. 5 lines 45-67, col. 6 lines 1-7, 34-65, selecting and viewing past programs according to a schedule). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Billock with the ability to select past programs, as in Girard, so a user could view at their own convenience a program that they might have missed.

Regarding Claim 9, the method claim has been discussed with regards to the system claim of Claim 1.

7. Claims 2, 3, 5, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billock et al. (6,314,575) in further view of Girard et al (5,751,282) and Gordon et al (5,920,700).

Regarding Claim 2, Billock further shows that the information with regard to the program includes information indicating allowance or rejection of the program (col. 2 lines 44-50, col. 3 lines 22-34, col. 8 lines 1-10, permitting only subscribers to access programs), and the terminal device further comprises a viewing information transmitting device for transmitting viewing information with regard to the program received by the program receiving device through the communication device to the center device (col. 13 lines 34-67, transmitting viewing information to central location). Billock also shows a center device comprising a transmission allowance selecting device for receiving the viewing information and selecting allowance or rejection of transmitting the program (col. 2 lines 44-50, col. 3 lines 22-34, col. 8 lines 1-10, permitting only subscribers to access programs, col. 13 lines 38-46, determining if viewer is allowed to view programming). Furthermore, Billock shows that a viewer is rejected or allowed to view certain media programs and is rejected or allowed on each selection (col. 8 lines 1-10, col. 13 lines 34-67). This is equivalent to a selection updating device. Billock and Girard fail to show erasing a program from memory based on the selection of allowance or rejection. Gordon shows the ability to erase programs that are not used, or when they have not been sent (col. 5 lines 40-65, col. 6 lines 1-40, resource and schedule manager

that delete unused or overused programs from memory to free up space). This allows the system to free up additional memory space for other programs. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Billock and Girard with the ability to erase a program from memory, as shown in Gordon, so that if a person was rejected from viewing a certain program, that program would be freed from memory and another program could be put in its place.

Regarding Claim 3, Billock shows that the information with regard to the program includes viewing information, and the image information for the program selection of a user includes a display on the basis of the viewing information (col. 6 lines 59-67, col. 7 1-67, col. 9 lines 19-55, fig. 6 & 7).

Regarding Claim 5, Billock shows that the program request signal is transmitted through a communications device to the center device on the basis of information indicating allowance or rejection of transmitting the program, included in the information with regard to the program and transmitted by the center device (col. 2 lines 44-50, col. 3 lines 22-34, col. 6 lines 25-40, col. 7 lines 1-67, col. 8 lines 1-10, 35-55, col. 9 lines 20-55, col. 13 lines 34-67, col. 18 lines 1-25).

Regarding Claim 10, the method claim has been discussed with regards to the system claim of Claim 2.

Regarding Claim 11, the method claim has been discussed with regards to the system claim of Claim 3.

Regarding Claim 13, the method claim has been discussed with regards to the system claim of Claim 5.

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8. Claims 4, 6, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billock et al. (6,314,575) in further view of Girard et al (5,751,282), Gordon et al (5,920,700), and Lerman et al (6,378,036).

Regarding Claim 4, Billock, Girard, and Gordon fail to show that the information includes request frequency. Billock, Girard, and Gordon further fail to show that the center equipment contains a calculating device for totaling the request frequency, a frequency updating device for updating the calculated request frequency, and a transmission allowance device that selects allowance or rejection on the basis of the request frequency. Lerman shows a VOD system that uses a queue to designate the allowance or rejection of the transmission of the program. When a user makes a request, a scheduling device calculates how many requests for a program have been made, and places the user request in a line. This allows the system to reject or allow the transmission of a program based on the request frequency (col. 2 lines 5-55, col. 3 lines 25-59, col. 4 lines 15-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Billock, Girard, and Gordon with the request frequency calculating and determining system of Lerman so that the system would be able to regulate the number of users viewing a certain program and control the amount of available bandwidth.

Regarding Claim 6, Billock fails to show that the center device updates the information with regard to the program on the basis of a fact that the program is broadcast by the center device. Lerman shows a system that updates a queue when a program is broadcasted to a user (col. 2 lines 5-55, col. 3 lines 25-59, col. 4 lines 15-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Billock, Girard, and Gordon with the request frequency calculating and determining system of Lerman so that the system would be kept up to date on what users have been sent video so that their request could be removed from the queue.

Regarding Claim 12, the method claim has been discussed with regards to the system claim of Claim 4.

Regarding Claim 14, the method claim has been discussed with regards to the system claim of Claim 6.

9. Claim 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard et al (5,751,282).

Regarding Claim 23, Girard shows a number of program streams (col. 4 lines 48-67, col. 5 lines 1-32) that can be accessed during different time by different terminals. Furthermore, Girard shows that when a person tunes a currently broadcasted program, this is done in the conventional way of tuning a channel (col. 5 lines 60-65, col. 6 lines 14-45, automatically tuning currently broadcasting data streams). Finally, since the head-end must establish and send another stream of data to send a past program to a specific individual (col. 6 lines 45-67, col. 7 lines 1-5, sending past program stream), this stream is different than the stream broadcasting current programs. Girard fails to specifically state that this extra stream is broadcasted on a different channel. Furthermore, Girard is silent as to the channel allocation or frequency allocation. Official Notice is given that it is well known and expected in the art to use one frequency channel to broadcast a single

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program. Therefore, it would have been obvious to one of ordinary skill in the art to modify Girard to use only one program per frequency channel so there was no need for complex digital channel allocation or channel mapping. This would greatly simplify the system and reduce overall cost.

Regarding Claim 24, the limitations of the claim have been discussed with regards to Claim 23.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogawa et al U.S. Patent No. 6,782,553 discloses an apparatus and method for transporting information about broadcast programs.

Aristides et al U.S. Patent No. 5,630,119 discloses a system and method for displaying program listings in an interactive electronic program guide.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Nalevanko whose telephone number is 703-305-8093. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**PRIMARY EXAMINER**